

1/8

10 30 50
AAAGCACAGACTTCAGGTCTCCAAGGAGGATGGGTGGCTGCAGCACAAGAGGAAGCGGC
M G G C S T R G K R P

70 90 110
CGTCAGCCCTCAGTCTGCTGCTGCTGCTGCTCTCGGGGATCGCAGCCTCTGCCCTCC
S A L S L L L L L L S G I A A S A L P
↑
130 150 170
CCCTGGAGAGCGGTCCCACCGGCCAGGACAGTGTGCAGGATGCCACAGGCGGGAGGAGGA
L E S G P T G Q D S V Q D A T G G R R T

190 210 230
CCGGCCTTCTGACTTTCTGCCTGGTGGCATGAGTGGCTTCCAAGACAGCTCCAGCA
G L L T F L A W W H E W A S Q D S S S T

250 270 290
CCGCTTCGAAGGGGGTACCCCGGAGCTGTCTAAGCGGCAGGAAGACCACCCCTCCAGC
A F E G G T P E L S K R Q E R P P L Q Q

310 330 350
AGCCCCCACACCGGGATAAAAAGCCCTGCAAGAACITCTTGAAAACCTCTCCTCGT
P P H R D K K P C K N F F W K T F S S C

370 390 410
GCAAGTAGCCCGAGCCTGACCGGAGCCTGACCGGCCACCCCTGTGAATGCAGCCGTGGCCT
K

430
GAATAAAGAGTGTCAAGT

FIGURE 1

CST 10 RPSALSLLLLLSGIAASALPLESGPTGQDSVQDATGRRRTGLLTFLAW 59
SST | : | ! : .
CST 60 WHEWASQDSSSTAEGGGTPELSKRQERPPPLQQ.....PPHRDKKPCK 101
SST 57 LSEPNQTENDALEPEDLPQAAEQDEMRLELQRSANSNPAMAPRERRAGCK 106
CST 102 NFEWKTFSSCK
SST 107 NFEWKTFSC

FIGURE 2

GCACCGAGGCT CAGCACGTCC GAGG ATG ATG GGT GGC CGA GGC ACA GGA GGC Met Met Gly Gly Arg Gly Thr Gly Gly	51
1 5	
AAG TGG CCC TCA GCC TTC GGG <u>CTG CTG CTG</u> CTC TGG GGG GTC GCA GCC Lys Trp Pro Ser Ala Phe Gly Leu Leu Leu Trp Gly Val Ala Ala	99
10 15 20 25 ↑	
TCC GCC CTT CCC CTG GAG AGT GGC CCT ACT GGC CAG CAC AGT GTG CAG Ser Ala Leu Pro Leu Glu Ser Gly Pro Thr Gly Gln Asp Ser Val Gln	147
30 35 40	
GAA CCC ACC GAG GGG AGG AGC GGC CTT CTG ACT TTC CTT GCC TGG TGG Glu Ala Thr Glu Arg Ser Gly Leu Leu Thr Phe Leu Ala Trp Trp	195
45 50 55	
CAC GAG TGG CCT TCC CAA GCC AGC TCC AGC ACC CCC GTC GGA GGG GGT His Glu Trp Ala Ser Gln Ala Ser Ser Thr Pro Val Gly Gly	243
60 65 70	
ACC CCC GGG CTG TCC AAG AGC <u>CAG GAA AGG CCA CCC CCC CAA CAG CCC</u> Thr Pro Gly Leu Ser Lys Ser! <u>Gln Glu Arg Pro Pro Pro Gln Gln Pro</u>	291
75 80 85	
<u>CCA CAC CTG GAT AAA AAG CCC TGC AAG AAC TTC TTC TGG AAA ACC TTC</u> <u>Pro His Leu Asp! Lys Lys Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe</u>	339
90 95 100 105	
<u>TCC TCG TGC AAG TAA CCC CAC CCT GGG CAT AGC ACC CTG GCC ACC CTG</u> <u>Ser Ser Cys Lys ! *</u>	387
110 115 120	
TGA GAT GCC AAC GAG ACC TGA ATA AAG ACT GTC AAT CAA C	427
125 130	

FIGURE 3

MOUSE CST	.....	....GCACGAG GCTCAGCACG TCCGAGGATG ATGGGTGGCC
RAT CT	.....	....AAAGCACAG ACTTCAGGTC TCCAAGGAGG ATGGGTGGCT
HUMAN CST		GGCACGAGGC CAAACATTGA TTTCAGGGCT GCCAGGAGG AAGAGCAGCA
MOUSE CST	GAGGCACAGG	AGGCAAGTGG CCCTCAG...
RAT CST	GCAGCACAAAG	AGGCAAGCGG CCGTCAG...
HUMAN CST	GCAGGGTGGG	AGAGAAGCTC CAGTCAGCCC ACAAGATGCC ATTGTCCCCC
MOUSE CST	GG.....	.GCTGCTGCT GCTCTGGGG GTCGCAGCCT CCGCCCTTCC
RAT CST	<u>AGTCTGCTGC</u>	<u>TGCTGCTGCT</u> GCTCTGGGG ATCGCAGCCT CTGCCCTCCC
HUMAN CST	<u>GGCCTCCTGC</u>	<u>TGCTGCTGCT</u> CTCCGGGGCC ACGGCCACCG CTGCCCTGCC
MOUSE CST	CCTGGAGAGT	GGCCCTACTG GCCAGGACAG TGTG CAGGAAGCCA
RAT CST	CCTGGAGAGC	GGTCCCACCG GCCAGGACAG TGTG CAGGATGCCA
HUMAN CST	CCTGGAGGGT	GGCCCCACCG GCCGAGACAG CGAGCATATG CAGGAAGCGG
MOUSE CST	C...CGAGGG	GAGGAGCGGC CTTCTGACTT TCCTTGCTG GTGGCACGAG
RAT CST	CAGGCGGGAG	GAGGACCGGC CTTCTGACTT TCCTTGCTG GTGGCATGAG
HUMAN CST	CAGGAATAAG	GAAAAGCAGC CTCCTGACTT TCCTCGCTG GTGGTTGAG
MOUSE CST	TGGGCTTCCC	AAGCCAGCTC CAGCACCCCC GTCGGAGGGG GTACCCCCGG
RAT CST	TGGGCTTCCC	AAGACAGCTC CAGCACCGCT TTCGAAGGGG GTACCCCCGA
HUMAN CST	TGGACCTCCC	AGGCCAGTGC CGGGCCCCCTC ATAGGAGAGG AAGCCCCGGGA
MOUSE CST	GCTGTCCAAG	AGCCAGGAAA GGCCACCCCC CCAACAGCCC CCACACCTGG
RAT CST	GCTGTCTAAC	CGGCAGGAAA GACCACCCCT CCAGCAGCCC CCACACCGGG
HUMAN CST	GGTGGCCAGG	CGGCAGGAAG CGGCACCCCC CCAGCAATCC GCGGCCCGGG
MOUSE CST	ATAAAAAAGCC	CTGCAAGAAC TTCTTCTGGA AAACCTTCTC CTCGTGCAAG
RAT CST	ATAAAAAAGCC	CTGCAAGAAC TTCTTCTGGA AAACCTTCTC CTCGTGCAAG
HUMAN CST	ACAGAATGCC	CTGCAGGAAC TTCTTCTGGA AGACCTTCTC CTCCTGCAAA
MOUSE CST	TAACCCCCACC	CTGGGCATAG CACCTGGCC ACCCTGTGAG ATGCCAACGA
RAT CST	TAGCCCGAGC	CTGACCGGAG CCTGACCGGC CACCTGTGA ATGCAGCCGT
HUMAN CST	TAAAACCTCA	CCCATGAATG C..... .TCACGCAAG TGTAATGACA
MOUSE CST	GACCTGAATA	AAGACTGTCA ATCAAC.....
RAT CST	GGCCTGAATA	AAGAGTGTCA AGT.....
HUMAN CST	GACCTGAATA	AAATGTATTA AGCAGCAGTG ATCTTCTCTC TCCTCCTTCC
MOUSE CST	.....	.....
RAT CST	.....	.....
HUMAN CST	CAAGTCATTG	AAAAGTGTGTT GTTATTTAAA TTCCATAAT GCCCAAATACT
MOUSE CST	.....	.....
RAT CST	.....	.....
HUMAN CST	GACGTGTCTT	GAGTAATTG GAACCCAAAA GTGAAGATCT TTGATAAAGA
MOUSE CST	.....	.....
RAT CST	.....	.....
HUMAN CST	TTTTTTTTGT	GGTCGACTG GACTGTGCTG AGTGCAGGCA CTGGGCTTT
MOUSE CST	.....	.....
RAT CST	.....	.....
HUMAN CST	CTTCTGATGT	TCATTATGGT GCTGGGAAGC TCTGTCTTG ATTTAAAATA *
MOUSE CST	.....	.....
RAT CST	.....	.....
HUMAN CST	AAATAGCTAA	AGGCTACAC

FIGURE 3a

	1	50
RAT CST	.MGGCSTRGK RPSALSLLLL LLLSGIAASA LP LESGPTGQ DS..VQDATG	
MOUSE CST	MMGGRG TGKK WPSAFGLLLL W...GVAASA LP LESGPTGQ DS..VQEATE	
HUMAN CST	..... MPLSPG LLLL LL SGATATAA LP LEGGPTGR DSEHMQEAAAG	
Consensus	----- -P----LLL -----A--A LP LE-GPTG- DS---Q-A--	
	51	100
RAT CST	GRRTGLLTFL AWWHEWASQD SSSTAFEGGT PELSKRQERP PLQQPPHRDK	
MOUSE CST	G.RSGLLTFL AWWHEWASQA SSSTPVGGGT PGLSKSQERP PPQQPPHL DK	
HUMAN CST	IRKSSL LTFL AWWFEWTSQA SAGPLIGEEA REVARRQE GA PPQQSARRDR	
Consensus	-----LLTFL AWW-EW-SQ- S----- -----QE-- P-QQ---D-	
	101	116
RAT CST	KPCKNFFWKT FSSCK	
MOUSE CST	KPCKNFFWKT FSSCK	
HUMAN CST	MPCRNF FWKT FSSCK	
Consensus	-PC-NFFWKT FSSCK	

FIGURE 3b

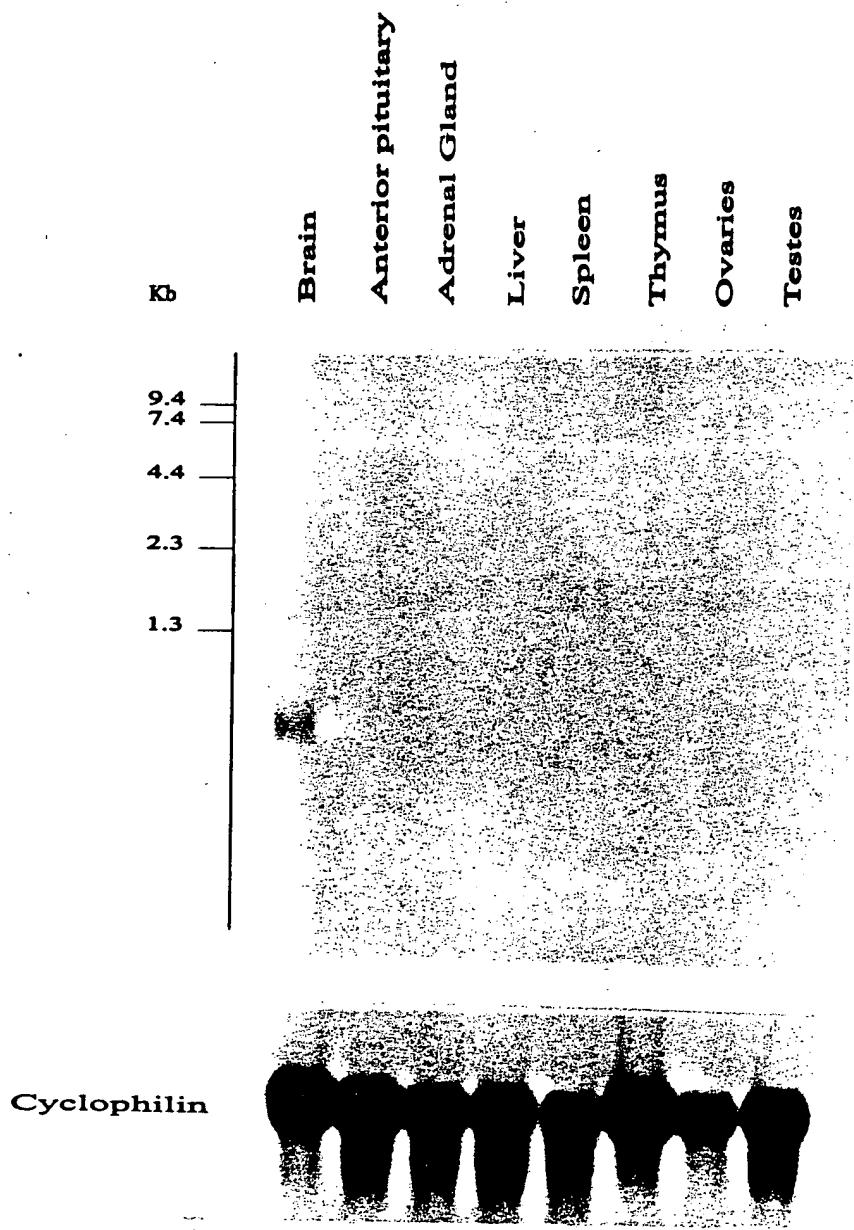
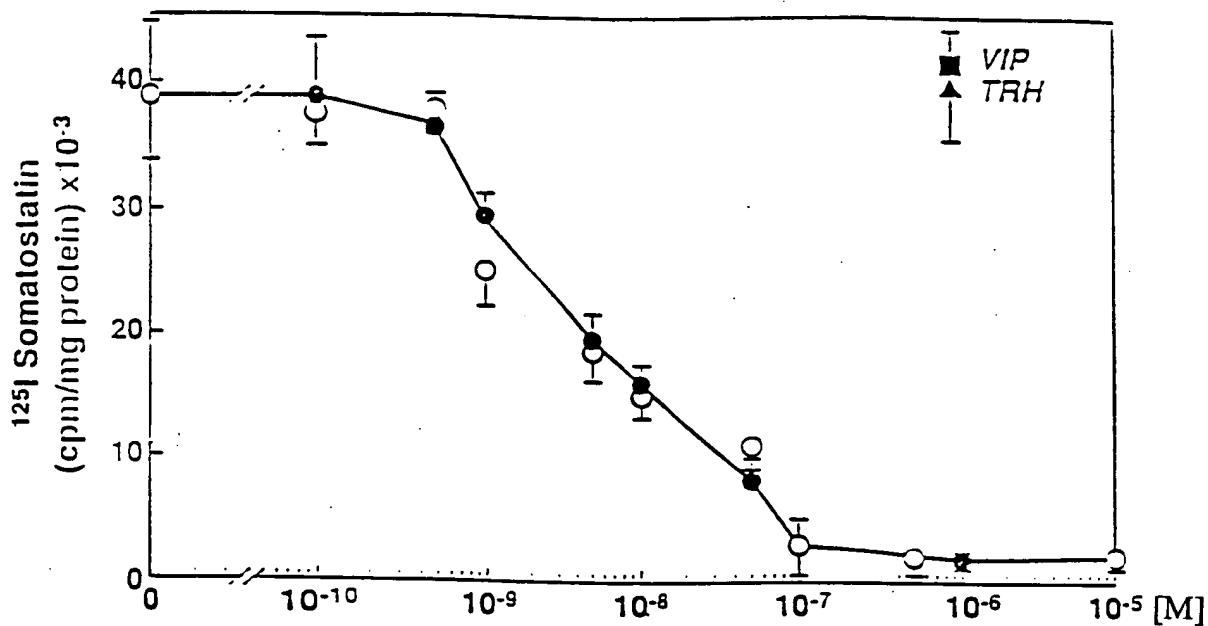
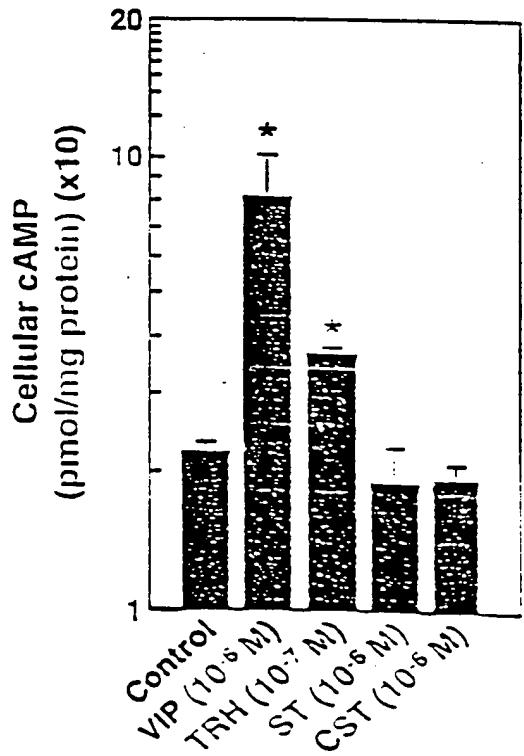


FIGURE 4

5A



5B



5C

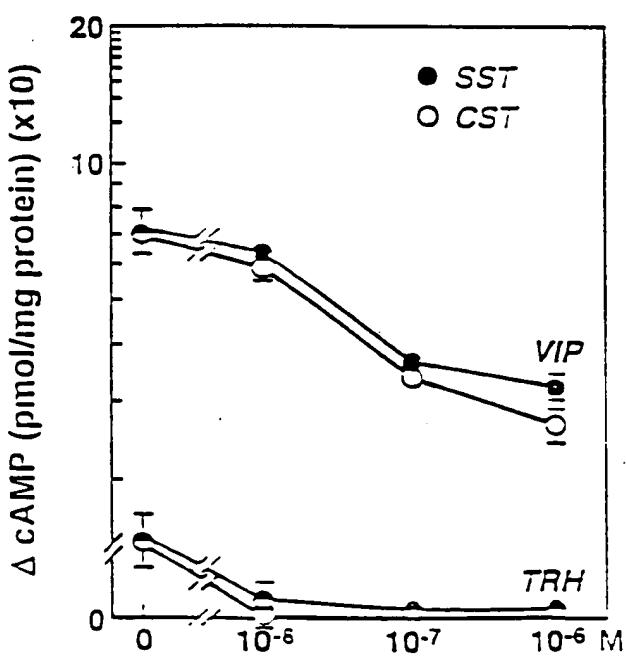
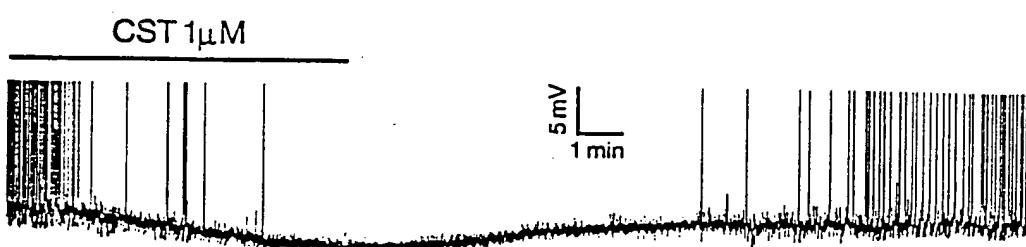
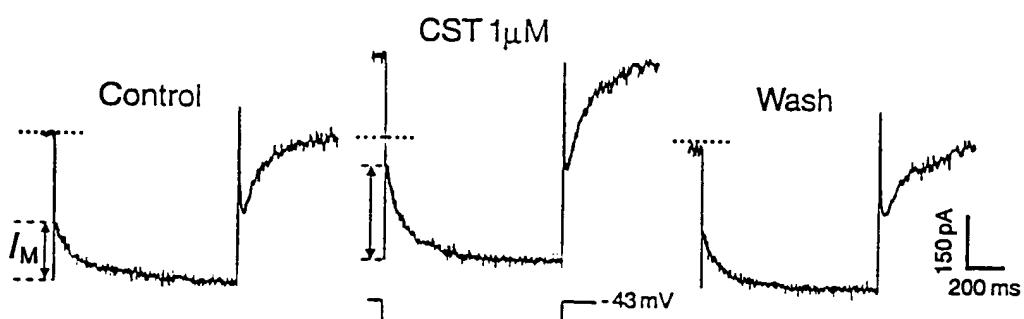


FIGURE 5

6A



6B



6C

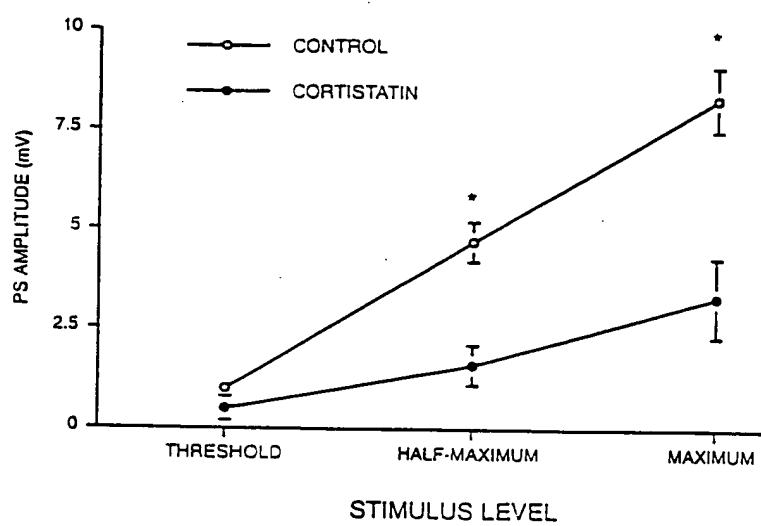
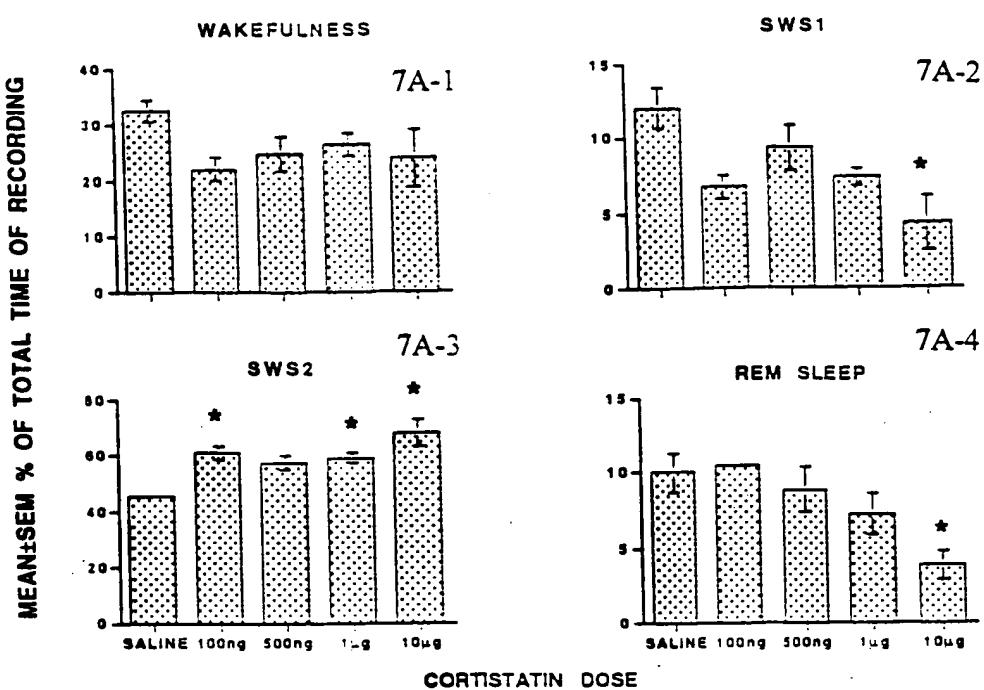
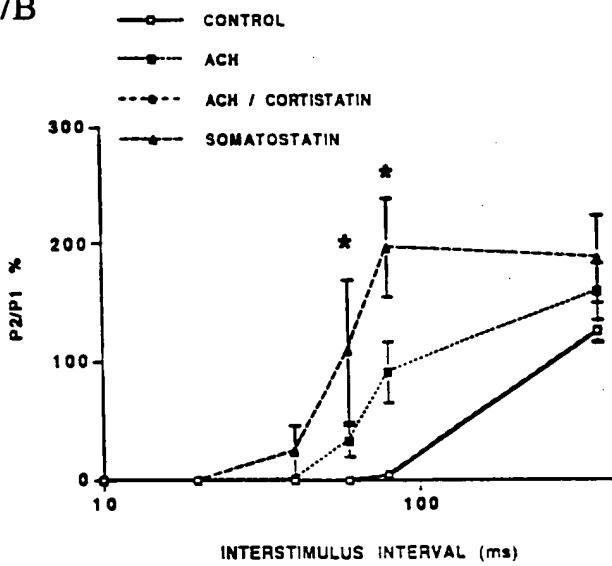


FIGURE 6

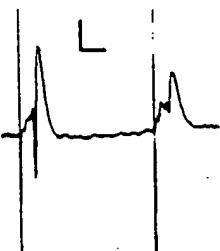
7A



7B



7C



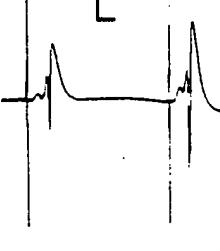
7D



7E



7F



7G

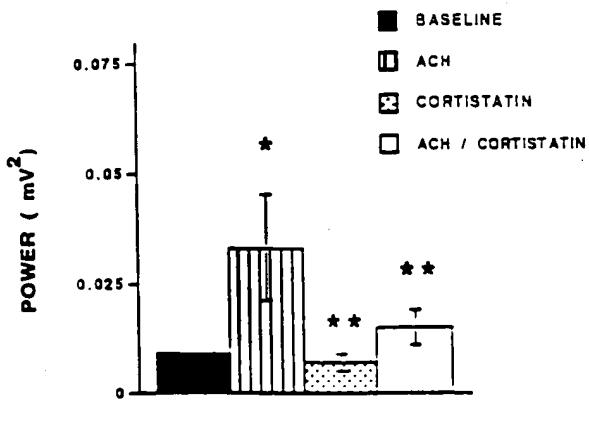


FIGURE 7